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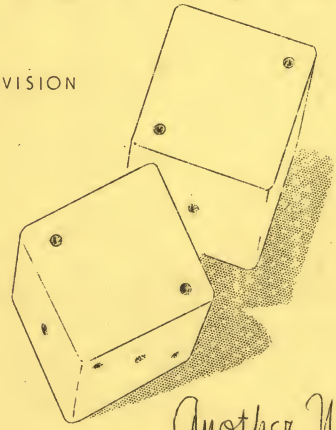
STATE DOCUMENTS

CENTER LINE

VOL. 2 NO. 8 OCTOBER 1939

LITTLE JOE ISSUE ☆☆

FROM DIVISION



Another Number from the Field

Published Monthly by the Montana Highway Department

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MEET

H. A. MORLEY, Maintenance Foreman. (Signs his memos HAM but this is no reflection on his character.) Harry was born November 7, 1888 at Lake View, Iowa and being somewhat smaller than the usual run of corn fed individuals, got himself lost in a corn field at a tender age and decided to move on to some place where the vegetation was not quite so luxuriant. He first went to the Black Hills of South Dakota where he received the final touches to his education at the State Normal School. There was still too much growth around the Black Hills so Harry migrated to Northeastern Montana in 1919 where he has been able to keep his head above the weeds ever since. Since that time he has had a hand at several kinds of work, including the Indian Agency. About 1930 he was elected County Treasurer of Roosevelt County but only served an hour and a half, resigning to accept the position of Acting Division Clerk under Scott P. Hart, then Division Engineer. Since that time Harry has worked up to Maintenance Foreman, the position he now holds. Bill Bawden says Harry can make more noise at an athletic contest than any person he knows. (that's something as Bill has taken in several such contests). Incidently, Harry is an old Army Man.

WALT KOESTER, Acting Project Engineer. Walt first saw the light of day at Dunnybrook, North Dakota. He stuck around our Neighbor State until he had wrangled a Pharmacists degree from the A. C. at Fargo, North Dakota. He was employed in that capacity at Deer River, Minnesota, Fargo, North Dakota, Spokane, Washington and Poplar, Montana. He would probably have stayed in the racket if he hadn't been such a good looking lad and been troubled by the weaker sex. Thinking he could get away from the "Women", he went to work for the Department as a Chainman in the winter of '27. Aside from a trip to South America for the South American Gulf Oil Company, Walt has been with us ever since and has come up the line to the capacity of Acting Project Engineer. Might add that Walt is single but don't rush girls as things are pretty well set and the date is tentatively set for December. (This is merely rumor but we believe we have it straight.)

HARVEY BOOTH, Acting Bridge Project Engineer. Born in Evanston, Wyoming some 52 years ago. Harvey received his C. E. Degree from Rennselaer Polytechnic Institute of Troy, New York. We do not know how he got back in the Western country but we find that he went to work for the Highway Department in 1919 for about a year. After that stretch he went to work for the U. S. Reclamation Service as Instrumentman and later became City Manager of Glasgow. Finding this all pretty tame, Harvey went into the Contracting business under the firm name of Hall & Booth. In the spring of '36 he returned to the Department as Instrumentman and is now acting in the capacity of Acting Bridge Project Engineer. Harvey is quite a fisherman and had a crack at some of the spots around Helena when he was transferred to Lincoln for a few weeks this summer.

EGBERT MORRIS AUNE, Instrumentman. Better known as "Eggs". Born at Ashby, Minnesota, October 22, 1905. He journeyed to Malta while still young enough to change his ways of living and calls Malta his home. Eggs

started in the Engineering game with the Great Northern Railway Company but decided to join the Highway forces and started as Rodman in April of 1930. He has been with the Department ever since and has never been officially out of Division Four. (Note: We do not vouch for his private life but believe that he has wandered to other parts of the State occasionally.) Eggs is quite a hunter and was lost for a week or so somewhere south of Malta. For details on this trip write to G. E. Woodward at Plentywood, as Woody was quite worried at the time. He's (Eggs - not Woody) single but Leap Year is coming up, Girls, so let's hear from some of you.

L. B. CROSSWHITE, Bridge Inspector. (Better known to his associates as "Grandpa".) Born in the Deer Lodge Valley in the Fall of '83. Received his later education in Anaconda. Grandpa has tried everything along the line and authorities report that the Judge once said: "Thirty days for illicit liquor traffic." Upon questioning the accused, this fact is verified and Crosswhite adds: "And I served 'er too." He put in a year with the Copper River Northwest Railroad Company building bridges but the weather wasn't to his liking so he returned. Crosswhite worked on "Steel" in St. Louis, Portland, San Francisco, Seattle and Chicago and most of the "Big Towns" in the old U. S. He was Iron Works Foreman for the A.C.M. for several years, so with all this experience, we wish to say that "Grandpa" really knows Steel and Bridges all the way. He joined the Department in the Great Falls Division in 1932 on the Teton River bridge. At present, he is Bridge Inspector on the Wolf Point Underpass, and if we knew Grandpa, she'll be right. The old Fox is married and he's old enough so that his family is on their own. Mr. and Mrs. Crosswhite live in a modern trailer house and made arrangements with Harold Tilzey to get his electricity from Harold's meter but since Harold found out that he was heatin' the place with a high powered electric heater we think that some other arrangements have been made.

LYNN J. MORSE, Instrumentman. Lynn was born in the Indian Town of Poplar, Montana in October of 1911 which makes him just a lad. Not being satisfied with available education in Poplar, Lynn attended the "U" of Washington. Before coming to work for the Department, Lynn put in stretches with the U. S. Department of Interior, W.P.A. and the U.S. Irrigation Service. He joined the Highway Engineering Personnel as Rodman in June of 1930. He was made an Instrumentman in March, 1936 and is serving in that capacity on FAP 362-B, Montana #5 between Plentywood and Westby. Lynn is married and has one "Engineer" to his credit. On inquiring into his bad habits we find that if he had any (and it is rumored that he may have had a few) he has overcome them since he became a "Benedict." Lynn, like the rest of us, is second in authority as far as Home Life is concerned.

.....

The girl stood on the forward deck,
The boat, it started going;
The pilot looked at her to see
Which way the wind was blowing.

.....

The real pessimist is a man from Kansas, who, when a tornado comes and takes away his house, stands and grumbles at his lot.

.....

OBSERVATIONS OF EASTERN MONTANA
by
G. E. Woodward

I have often heard remarks about the eastern half of Montana as having been used merely as a spreader to keep the western part of the state separated from North Dakota. To a person who has sojourned in that section for a number of years, this observation is entirely uncalled for.

You have merely to study the people and become acquainted to learn that they are the embodiment of sincerity and hospitality. I have never heard of a person being turned away, if he was in need of food or shelter. I've talked with settlers who have had small crops and they always have the spirit of optimism.

Only a few days since a farmer who had been hailed out told me he started threshing what was left and found he could make $7.50 per day with the yield he had. "You know", was his remark, "that you can run a threshing outfit for $5.00 a day, so your crop isn't a total loss." That is the spirit that has made America what she is today and as long as it lives, there will be no danger of our country being anything but a true democracy no matter how much propaganda is unloosed abroad.

The farmers are now beginning to work with nature out through this region. They are talking now of getting in stock on the range, putting small irrigation dams on the creeks and diversifying crops, realizing that the days of the great wheat ranches are gone as far as this region is concerned. Soil conservation and the production of crops that can be developed by experimentation will make of this country a place of which the state will be proud. Even though the settlements will be small, the radio and good roads will bring the people closer together and mould them into the backbone of the nation.

Montana has made tremendous strides in the last twenty years and the enterprize and ambition developed in that time will gather like a snowball until the remainder of the country will sit up and take notice.

As soon as the inhabitants get in tune with nature and work with her, you will find few instances of the people being starved out and forced to migrate. It is a case of balancing the fat years against the lean and for the man who has learned to earn his bread by the sweat of his brow, there will be no fear but that he will prosper in proportion as he uses the talents that have been given him.

* * * * * * *

Jack London, the noted novelist, was talking with his hostess one evening at dinner. He was explaining that he considered himself a good musician. The hostess, eager to please her honored guest, leaned forward and breathlessly admitted that she had not known that to be one of his accomplishments. The discussion ended abruptly when he remarked, "Oh yes, when I was visiting my father in California, there was a cloud-burst. There we were, floating downstream together, father on the sofa and I accompanying on the piano.

.....

MAINTENANCE, DIVISION NO. 4

Maintenance of Highways, as anyone who has any connection therewith, knows, is not a position, it is a real job. Primarily we are working for the State and have only to maintain the Highways in a manner satisfactory to Higher State Officials. This is a relatively easy job (not trying to polish the Old Apple) for our superiors are a real group of men and know what should be expected of a maintenance force, but the real job is trying to satisfy the travelling public, for whom we are also working, and who are the hardest people in the world to satisfy. But then, as once told, when a certain person was inclined to cry a little, "Your shoulders are broad, you can take it." And since it takes a broad shouldered group to handle the work connected with Highway maintenance, "We can take the rest of it as well."

In Division No. 4, we have approximately 460 miles of 7% road to maintain, as well as approximately 50 miles of Feeder Road to watch. 226 miles of the road to be maintained is U. S. No. 2, with Wolf Point about 80 miles from the east end, which makes quite a trip each time it is covered. Over the Division we have 11 Sectionmen, each responsible for a little over 40 miles of Highway. Of the 460 miles to maintain, we only have about 35 miles of gravel, which is divided up between four sectionmen.

While we do not have any mountain roads to maintain, we do have some nice little hills, some of which are inclined to slide once in awhile, and since we have some of the oldest roads in the State, as well as some of the newest, we have some tough maintenance as well as some which is easy. Some of our roads have more curves and angles in them than the Centerline has ever had, while in one place we have a tangent of 70 miles in length. We also have some sections which are pretty flat, making drainage quite a problem (Whenever we get enough water to make drainage necessary.)

To most people, especially those of the more scenic parts of the State and country, we have no scenery worth mentioning in northeastern Montana. But when crop conditions are as they have been this year, it was quite a site to drive up out of some of the low places and be able to see green fields and stock, almost as far as the eye could see. At least this looks good to us of northeastern Montana, who have lived here so long that we no longer expect too much, even when out on a trip.

THE PAID TOURIST GANG

FOSCO SIMONS, Sectionman: Fosco headquarters at Poplar, but lives at Brockton. He will not live at headquarters as he gets up so early in the morning, he would have to wait too long for his helper to come to work. When Fosco was first employed he told the following story, trying to convince Scott Hart that he was a good workman. "He had been working in a Powder factory and one day threw down a lighted match after lighting his pipe. He told that he had to work up a real sweat stomping the fire out of that powder." He is 48 years old, married and has several helpers. He has been a Paid Tourist since 1928.

JOE MADDEN, Sectionman: This old Soldier headquarters at Culbertson, the old Cow Town of this part of the State, and although he is 44, married and has two promising young sons, he will still take the Bull by the Horns and give him quite a throw. He has been riding the roads since 1927.

H. P. PAULSON, Sectionman: 'Boob' the little fellow of the Gang (weighing only a measly 300 pounds) does his touring both ways out of Froid. The lightest piece of equipment does no slipping when he gets aboard. It has been reported that while in the Service during the World War, they called on Boob every time a truck or tank was stuck. All he had to do was lean over a little and the equipment moved. Boob is 43, married and has quite a family. He started his professional riding in 1930.

OTHO McCABE, Sectionman: Otho headquarters at Plentywood, the town which originally was without a tree in sight. Otho is 40, an Ex-Serviceman, married and with two promising young athletes, but like most of us in this part of the State, must have something to do during idle moments, so Otho plays baseball, He used to be pretty good at it too.

GEO. P. HUDDLESTON, Sectionman: George is another little fellow, weighing in the neighborhood of 250 pounds who rides, whenever he can find anything that will hold him up, out of Flaxville, the town around which they only raise wheat. After the War, in which George helped Boob occasionally, he tried farming, but the country was so dry that it got so that George could hardly raise himself, so he quit and started working for the State in 1934. He is 53, married and has one small daughter.

W. G. EVANS, Sectionman: Tiny is one of our youngest sectionmen, in years. In fact he is so young that it is hardly safe for him to be out alone (with one). He is 37, married and has one addition to the Curves and Angles. He is a native Montanan, having been born and raised in the vicinity of Culbertson. He started riding for the State in 1929. At present he is at Camp Perry, with the Montana National Guard Rifle Team, so do not let him get a shot at you. Because of his youth, we placed Tiny's headquarters midway between Wolf Point and Scobey.

E. E. CAREY, Sectionman: Ed. is our oldest Sectionman, in years of service with the state, starting in 1925, so he headquarters and rides out from Wolf Point. He hails from South Dakota, where he was born 46 years ago. He did not stay there long though, coming to Montana prior to the War and serving as a part of the Montana contingent. He is married, has one hired man and one school teacher. Ed. like most of us, tried farming, and still shows effects of the drought.

C. E. HOLDER, Sectionman: Slim started his professional touring at Bainville, but now headquarters at Nashua, being a believer in the old adage "Go west, young man." Slim is some hunter and fisherman, and likes to tell about the bags he has filled or the ones which got away.

I. S. ALEXANDER, Sectionman: Alex. is the Sectionman who wears the black Bow Tie. He headquarters at Glasgow, is 35 years old, married and the father of one truck driver and one Steno. Louis started herding a State Truck in 1931 and being somewhat of a machinist, puts in most of his spart time in the basement of his home where he has a well equipped shop.

WM. J. MORAN, Sectionman: Bill spurs them up and down the road from Saco, where he has been employed since 1933. He is 39, married and has two young riders coming up. It is understood that Bill started singing in the Cathedral of France during the World War, and still likes to start a song whenever given a chance.

R. C. HOYNES, Sectionman: Ray gets paid for doing his riding out of Malta, where he started in 1931, having decided that he needed more than one acre of land in this part of Montana, from which to make a living. He is married, has a nice large family of gardeners and cooks, and stopped his fighting at the time the Armistice was signed.

THEO. STEMMES, Relief Man: Ted is one of those men in every organization who does anything, anytime, anywhere. He starts his touring trips from Wolf Point, and goes anywhere in the Division. He started in 1925 as a Team Patrol Operator, and has worked in almost every capacity on maintenance since that time. He is 44, married and has six riders and one office girl. He is another man who planned on Social Security when he got old, and who is now wondering how long he will afford social security to others instead of having it furnished him.

SAM DAVIS, Utility Man: Sam is our original American, runs any equipment we have and if necessary will operate any of it equally well. He also starts his paid trips from Wolf Point. Sam used to be pretty handy with his fists, having had considerable ring experience, and still insists that he will fight anything if properly induced. He becomes a little more wary each day though, for he has remained single for 33 years, regardless of relentless inducement to the contrary. Sam was riding up the highway with Mr. Lockey one day, when they came up behind an Indian Service Car. Mr. Lockey, being unfamiliar with the initials on the license plate, asked Sam what the U.S.I.S. stood for. Sam promptly replied "Uncle Sam's Illiterate Sons."

BRUCE RANDALL, Gas Distributor: Boots is another of those who had to come back to the old Stamping Ground. When a short time out of High School, he went back east to make his stake in life. After a year or so in Detroit and other eastern places, he decided that northeastern Montana needed him more than they did back there, so returned to Wolf Point and started with the State Highway Department in 1931. He worked with the Construction forces awhile, but decided that he would let someone else drag around those rear chainmen who let their feet drag so became a paid Tourist. He now keeps the forces supplied with gasoline and other necessary items. He is 34, married and the father of one gangster and a nurse who gets the blame for all the trouble the gangster gets into. He spends his spare time ramroding the Wolf Point Stampede.

C. E. SHIPMAN, Senior Clerk: Shippy does not talk much about himself so we are unable to get any dope on his early history, but he must have made some for he seems to be willing to rest on his laurels. However, we have learned that he is 58 years old, married and has one machinist and a society Belle to entertain him. He started with the State at Billings in 1927, was Resident Engineer at Miles City for a time, resigned because of ill health and returned to take a job as project Engineer at Plentywood. He now has charge of stores and Inventories at Wolf Point, and does pretty well keeping track of all small items which the shop and field force report and fail to report. He rides pretty close herd on the whole gang, beside having time to tell a story once in awhile or sing a song in the biggest bass voice you could imagine for so small a man.

W. C. BAIN, GANG(STER) Foreman: Gob or Sailor is the oldest in years of service in the Maintenance Department in Division No. 4, having started his touring in 1922, although he still maintains he is as young as any of the boys, and some times acts that way. However, he might act young and foolish once in awhile, but he has always recovered in time to remain single during his 43 years of life. He hails from the Webfoot State, where the boys wash their hands first. He spent so much time on the waters of the world, both before and during the World War that he still likes comparatively flat surfaces, so located in northeastern Montana, and always returns, no matter to what part of the country he takes a trip. Gob especially likes the book work connected with a Special Maintenance or Betterment job.

H. A. MORLEY, Maintenance Foreman: 'Nuf Sed.

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SUMMER COMPLAINT
By the Center Line Staff

Center Line, oh Center Line,
Why do you come so soon like?
We hardly get you done for May
When here you come for June like.

From twentieth to twentieth
Seems like no time at all, yet
Every month you roll around,
And now it's almost fall yet.

In summer months when we're the rushest
That's when you get smaller.
But maybe now you'll get filled out
'Cause summer's turned to faller.

Oh Center Line, oh Center Line,
You worry us in summer,
But we'll catch up with you by heck
About Novummer or Decummer.

.....

The following is submitted by one of the boys with the hope that the State Highway Patrol will adopt it as a standard test on Saturday nites and early Sunday mornings:

He is not drunk who from the floor
Can rise again and drink some more.
But he is drunk who prostrate lies
And cannot drink and cannot rise.

.....

WOLF POINT STAMPEDE
by
Bruce Randall

In order to describe any rodeo or stampede, it is necessary to give a general outline of the rodeo game.

This sport developed and grew to maturity in the United States and Canada. It started as a community get-to-gether and branched outas champions of one locality matched their abilities in bronc riding, calf roping and bulldogging against champions of other communities. As the road systems of our states developed, these cowboys loaded their saddles and roping and dogging horses in cars, trucks and trailers and travelled from one stampede to another trying their luck against the best hands of that part of the country.

Purses were often meager and shows a long ways off so these boys had to be good as well as lucky to get by financially. About 1923 the game really started to grow. Shows became closer together, purses higher and the sport took on a new importance. Consequently, more and better cowhands came on to the circuit, management became more efficient and the popularity of the Rodeo has gradually increased throughout the years.

In 1929, the managements of a number of shows had a general meeting to discuss their individual problems in staging and handling these shows. This meeting resulted in the formation of the Rodeo Association of America. The purpose of this organization was to standardize the rules of the various events, select honest and competent judges, see that all purses and prizes were paid to the contestants and thus drive out the unscrupulous promoters. They further evolved a system of picking the champions of various events and a champion All-Around Cowboy.

By accomplishing these ends, the Association has brought before the people of America and Canada, a thrilling and exciting sport that is conducted fairly and honestly to the contestants and all who participate in the program of a modern rodeo or stampede. At the present time there are ninety-six shows included in the Association. This number includes every major show in the country.

There is a well defined rodeo circuit which starts in Texas and Arizona in February and March, California in April and May and from there the trail leads north to the famous rodeos and stampedes of the Old West in June, July and August. Montana entertains thousands of tourists as well as its own population at the rodeos held at Livingston, Red Lodge, Lewistown, Butte, Billings, Great Falls and WOLF POINT.

At any of the above mentioned shows, the crowd witnesses the cowboys whose names are well known in the Rodeo Circuit throughout the country. Down through the years there has been a long list of contestants who were and are known as the "Tops". Among the more famous, we find Bob Askin of Ismay, Montana, probably the best bronc rider that ever drew a breath. In his time, Bob won ten straight shows, a feat never approached before or since. Ranking close to Askin is Paddy Ryan his running mate. It was a sad day for the rest of the bronc riding fraternity when they pulled into a show. Pete Knight was another, now dead from the result of being trampled by a bronc in a California rodeo.

Of the present boys, Burel Mulkey of Salmon City, Idaho, last years' World Champion Cowboy, Nick Knight of Cody, Wyoming and Fritz Truan of Lancaster, California are the best.

Of the Calf Ropers, Everett Bowman of Hillside, Arizona, Champion Cowboy of '37, Toots Mansfield of Bondera, Texas and Jake MacClure of Lovinton, New Mexico are considered to be the best boys that ever pinned a calf's ears back.

Bulldoggers are Gene Ross of Loyre, Oklahoma, Hub Whiteman of Clarksville, Texas and Dick Truitt of Stonewall, Oklahoma. Of the bunch, Gene Ross is probably one of the best anytime or anywhere. He's a big, stout fellow, tougher than any steer with three-foot horns.

There are probably about 200 cowboys following the game as a business and generally a very fine class of men. Most of them are ranch owners and are honest and fair in their dealings and good sportsmen. Of this bunch of men there are about 30 who earn from five to fifteen thousand dollars a year and are the best. The balance earn from five thousand dollars down.

Championships are awarded on the basis of money won. Every show keeps a record of every dollar paid each contestant and this is forwarded to the office of R. A. A. in Salinas, California which is the clearing house for all member shows. Every contestant is credited with one point for every dollar won in roping and dogging events, one and a half points for every dollar won in riding events. These points are totaled every month and a bulletin issued each member show showing total points each contestant has won in all shows reported. The four leading contestants in each R. A. A. event and the total points won in that event is used as a basis for determining the winner. At the end of the rodeo season the cowboy with the greatest number of total points is declared the World Champion Cowboy. R. A. A. Cowboy standings of September 9th, 1939 place Paul Carney of Galeton, Colorado in the lead for the World's Champion Cowboy for this year.

Rodeos are generally staged for the purpose of advertising a town or city. Very few of them can show a profit on the ledger and nearly all of them are conducted by the public spirited people of their community and many times it costs some of them their hard earned cash. Here at Wolf Point, the businessmen have donated thirty thousand dollars to the Stampede since its inception in 1921. With the cooperation and help of every one in the community, it has grown to be one of the outstanding shows of the West. Wolf Point's Wild Horse Stampede is an activity of the Wolf Point Commercial Club, sponsored and backed by the businessmen and every purse advertised has always been paid.

Most rodeos contract the stock for their shows from rodeo contract men, which means that the stock is hauled from one show to another. The cowboys get to know the stock and what they will do. Here at Wolf Point Stampede, the McLeod family, from up along the Canadian border, bring down 125 head of mature geldings that are wild (and how) unbroken and are not used from one stampede to the next. The cowboys do not get a chance at these broncs until they are turned out at the shute and no one knows what they will do, least of all the rider. This method furnishes plenty of excitement and thrills for the crowd and tough riding for the riders. Long-horned steers are shipped from Pecos, Texas, for the doggers and native calves are used in the roping.

This stock is used but once a year and gives a good account of itself.

The three main events, bronc riding, calf roping and bulldogging, are spaced by trick riding and roping, bareback riding, horse racing, cowboy relays and clowns. It is a fast snappy show and the real thing all the way. The gounds are especially built for a rodeo and the convenience of the crowd. The chutes come out from under the grandstand so the crowd is right on top of all the action. The show starts promptly at one-thirty P.M. and lasts from four to five hours depending on the number of contestants. There are usually about 35 bronc riders, and twenty to twenty-five ropers and doggers.

All purses are paid promptly after the completion of each individual event and winners are then introduced. This is the only show in the U. S. or Canada that pays its purses at the completion of each event. Ranked by the Billboard magazine as second to Fort Worth as the outstanding western attractionof its kind, Wolf Point is justly proud of its Wild Horse Stampede and intends to stage its 20th Annual Stampede in July of 1940. HOPE TO SEE YOU IN WOLF POINT NEXT JULY FOR THE 20TH ANNUAL WILD HORSE STAMPEDE

* * * * * * *

Center Line blushingly takes the rap concerning the following, which comes from some hawkshaw in Division 4:

"Quote from the July issue of the Center Line, issued by the Division 1 boys -- page 25:

> "Engineers are often baffled by the fact that some of the girls with streamlined figures offer the most resistance.

"Now dear readers (we are not being optimistic -- we have a reader) turn to page 26 of the same issue, and you will find the identical observation.

"We of Division 4 wish to inform the baffled engineers of Division 1 that we will do all in our power to offer them assistance upon first glimpse of a red flare placed in a conspicuous spot upon Division One's highly touted Continental Divide."

That's what we get for having two or three typesetters who read the same magazines. Our apologies, Division One.

.....

'Twixt optimist and pessimist, the difference is droll,
The optimist sees the doughnut, the pessimist only the hole.

.....

DIVISION SHOP

When Division No. 4 was first organized, with Scott P. Hart as Division Engineer, the Division Office was at Poplar, but as there was no suitable place there for the Division Shop, it was located in the County Shed at Wolf Point, and by removing almost everything else from the floor, there was room to get one truck or Caterpillar into the shed for overhaul.

In 1931, construction of the Division Shop and Office was started at Wolf Point, as it was decided that this was the best location for Division Headquarters. The building was ready for occupancy in the spring of 1932, and the shop equipment was moved in at that time. With the large shop space in the new building, the boys were about lost, as they only had a small amount of shop equipment, and had to hunt around the building each time they wanted a tool. They soon become acclimated, and with the continual addition of new equipment and tools, it now looks like a real shop, and most any class of repair work can be done therein. (This is complimenting the shop force, quite a bit.) Now the boys are crying for more shop space, as they claim they still do not have room for enough pieces of equipment to be repaired at the same time. Being pregressive, the more they get the more they want.

The following men constitute the Shop Force:

WILLARD BUTZLAFF, Division Mechanic and Shop Foreman. Jess. is 39 years old, married and has one young Blacksmith growing up. He started driving truck for the State Highway Department in September, 1927, and when the Division Shop was started, became Division Mechanic, which position he has held since that time. Jess is quite a fisherman, making a trip each year to the western part of the State in order to indulge in that sport for a short time. He also is quite a hunter, and one time, when there was no other game to hunt, tried to run down some privately owned geese, but upon the appearance of the owner, gave up this phase of the sport.

OLIVER MONTGOMERY, Mechanic. Oliver is 42, married and has three helpers around the house, as he does not believe in helping with the housework. He started with the Highway forces in 1931 as one of the State's paid tourists, but graduated into one of the shop force when the new shop was opened and additional mechanics were needed.

WM. BALBINOT, Mechanic. Bill is 39, married, but does not believe in feeding anyone but himself, outside the cook. Bill started with the State in 1927, and still wonders what he did with all the money. Bill has quit the bird hunting we have in this part of the State and will hunt nothing but Elk and Bears.

V. SCHAFFBERG, Mechanic Helper. Vic has reached the ripe old age of 38 years, is married and his two sons already have some stiff arguments as to which will be the best mechanic. He started with the Highway Department in 1931, with the Paid Tourist Crew and quit the road for the shop. Vic, being of the right build, 5'5" tall and weighing 200 pounds, delights in dancing, and specializes in jigging or tap dancing.

ALBERT BERNDT, Mechanic Helper: Tom Hardie, as he is called, is a young man of 46 years, married and has one young soldier to his credit. He recently visited the young man in a CCC Camp and says the boy looks more like a soldier than ever. Albert has been with the State forces since 1934.

NATE GREEN, Mechanic Helper: Nate is 38 years old, married and has two hired men and one hired girl to his credit. After trying dry land farming in Montana for a number of years, Nate decided that he had better join the paid tourist gang in order to have something to live on from month to month. He has been with us since 1931.

C. A. RODGER, Handy Man About The Shop: (Little Cliffy in pusson) has reached the age of discretion, being 37 years old, is married, but must be part Scotch so is saving his money instead of spending it on children. He has been with the State since 1926, and his latest wish is that he were as powerful as Lou Bodecker, with his own disposition, so he could induce some of the boys to stop kidding him all the time.

E. J. CODY, Watchman-Janitor: Ed. is 58 years old, is married and has three young men to keep him in his old age, but is wondering when that time is ever going to begin. He can see a fly-speck on a window pane farther than any other person alive and believes that if the high fence were kept closed around the shop grounds, it might help to keep the flies out.

L. J. DUFFEY, Beautification Caretaker: Mr. Duffey is the youngest man around the shop, being only 73 years of age, is married and is spending most of his spare change bringing up his grandchildren in the proper Irish manner. The boys around the shop have taken to waiting for payday each month, because of the present Mr. Duffey insists on bringing out after the day's work has been completed.

.....

Modesty is a relative term of widely consistent interpretation, as for instance:

Freddie, age 5, vainly hammers on the bedroom door for admittance. "But you mustn't tum in, Freddie," expostulates Nellie, age 3, from within. "I just dot up, and mamma says girls mustn't let little boys see 'em with only their nightie on; but --" and only a moment intervenes when, having solved the problem satisfactorily, she adds: "You can tum in now -- I've tooked it off."

.....

"This check is doubtless all right," said the Assistant Cashier politely, "but have you anything about you by which you could be identified?"

The pretty young thing blushed: "I have a mole on my left knee."

.....

FORT PECK DAM

By

Lynn J. Morse

Division 4 has the distinction of having one of the largest and one of the most hazardous engineering projects in the world under construction within it's boundaries, namely Fort Peck Dam. It is situated 20 miles southeast of Glasgow across the valley of the Missouri River.

Fort Peck Dam was initally investigated by the Reclamation Service some 30 or 40 years ago. The dam site was located at that time and the underlying area surveyed and mapped. However, Fort Peck didn't become a reality until 1933 when it was approved as a river navigation project, and therefore was assigned to the Corps of U. S. Army Engineers for construction with Col. T. B. Larkin and later Major Clark Kittrell in charge.

It's hard to imagine the imensity of this undertaking unless you see the project, and even then it doesn't seem as large as it is because it covers so many different types of work all of which are scattered over a large area. The dam itself is an earth embankment 220 feet high by approximately 9,000 feet long, with slopes of about 4 to 1 upstream and 8 to 1 downstream. There is approximately 1,000,000 cubic yards of earth fill in the structure. It will form a reservoir area of 245,000 acres with a crpacity of 19,500,000 acre feet. The dam is faced on the upstream side with quarry rock and field stone. The quarry rock came from Snake Butte 14 miles south of Harlem, Montana, where it was quarried and shipped 151 miles to the dam. Approximately 500,000 cubic yards of rock weighing 1,181,000 tons were quarried and used. The downstream side is faced with gravel which came from Cole, Montana, which is about 70 miles from the dam site. I might add that all the aggregate for the concrete structures on the project came from this gravel pit. Three giant walker drag lines were used for excavation and loading in conjunction with a large crushing and washing gravel plant. Production at Cole ranged from 60 to 120 car loads of material a day, depending upon the construction progress at the dam site.

The method of construction chosen for the dam was the hydraulic fill method. Four dredges were constructed to pump the material into the dam and a large number of booster pumps of 2,500 H.P. were mounted on barges to help pump the fill material over the great lengths of pipe line from the borrow pit areas to the dam. The distance from the dredge to the fill itself was as far as 25,180 feet, or approximately five miles. An average of 2,000 cubic yards per hour was discharged by the dredge at this distance. As much as 3-1/2 million cubic yards were placed in one month.

There is a sheet piling cut-off wall extending across the valley slightly upstream from the axis of the dam. This cut-off was driven about 100 feet below the old ground line with about 30 or 40 feet left above the ground line to extend up into the fill. The sheet piling was driven into an impervious clay to give a complete cut-off. The sheet piling was driven in 70 ft. lengths and was spliced by arc welding. The pile drivers were tall steel structures that moved across the valley on tracks as the work progressed.

Another part of the project is the diversion tunnels of which there are four. This phase of the work offered many difficulties because of the treacherous and blocky shale encountered. Almost every foot of the excavation had to be supported at once to hold it in place. In the original design of the tunnels they were to be steel lined and back-grouted with concrete; however, as the construction of the whole project progressed it was evident that the main fill was proceeding at a much faster rate than was the tunnels. In other words, the tunnels would be needed for the diversion before they would be ready, therefore the design was changed on those tunnels left to complete and they were lined entirely with concrete. The tunnels are approximately 45,000 feet long and have intake structures and outlet structures with a large apron to alley the turbulence of the water as it leaves the tunnels. There is also a control shaft over each tunnel. The shafts are located about midway between the intake and outlets. The tunnels each have a capacity of 25,000 second feet or a total of 100,000 second feet.

One of the main contracts of the Fort Peck Dam construction was that of the spillway. The spillway is located three miles east of the main dam and has a capacity of 250,000 second feet. It is very suitably located in a natural draw which had to be excavated to proper grade and elevation in relation to the reservoir. This structure is made entirely of concrete with the exception of the spillway gates which are made of steel. These are electrically controlled.

Other work that was a subsidiary undertaking was building of a railroad from the Great Northern main line 12 miles north. Also the building of a new and modern city to accommodate 5,000 employees and all the administration forces. This last work involved planning the city layout of streets, sidewalks, water works, sewers, etc. Even the stores and recreation buildings were built at the same time as the rest of the city. There was also a 254,000 volt transmission power line built from Great Falls to provide power for Fort Peck.

Subsequent to the inauguration of Fort Peck, agitation has brought about approval of the generation of electrical power from the dam. Five million dollars has been allotted for hydraulic turbine installation consisting of one 50,000 H.P. unit and one 20,000 H.P. unit. There has also been stressed the irrigation possibilities offered by the vast water supply impounded by the dam. Last summer there was a large staff of surveyors making topographic surveys of all irrigable areas included in 100 feet more elevation than was covered by the original Reclamation Survey. They also investigated the possibilities of pumping back up the valleys of some of the tributaries of the Missouri. So now the purpose of the dam stands as navigation improvement, flood protection, irrigation and the generation of power.

What was termed "a shipwreck in sight of land", the major accident of the entire construction, occurred on September 22, 1938, when there was a partial failure of the east upstream face of the dam. The fill was 95% complete when a section of the dam 1,700 feet long slid 1200 feet into the reservoir, moving 5,217,000 cubic yards along with tons of rip-rap. Thirty-four men were carried along with the slide, of whom eight were killed. This slide was of great significance to engineers because

there was such a careful scientific soil control in the building of the dam, which many had hoped would do away withthe serious danger of slips so prevalent in hydraulic fill dams. Every borrow pit was carefully sampled by drills and was carefully tested by a soils laboratory that had all the resources of modern soil mechanics procedure. Many of the methods of testing were originated and devised by the engineers of Fort Peck, and were supposed to be far in advance of anything ever used previously, but still there was a slip failure.

An inquiry board of engineers and geologists was appointed as experts to investigate the break. The investigation included soil sampling and testing by means of core drilling in pre-frozen ground to show the undisturbed position and character of the ground. Tunnels were dug in the east hill side and shafts were dug in the dam outside the slide area. The board, after studying several months, finally attributed the break to the lack of shearing resistance of the weathered shale of the foundation to the great shearing force to which it was subjected. There were two dissenting members of the board. However, using the general opinon as a basis, a reconstruction plan was formulated whereby the construction could proceed. The plan calls for a new tight rolled fill core of glacial till through the slide area which will be bonded to the underlying old core by a steel sheet piling cut-off wall. The embankment of the slide area will be built up by the hydraulic fill method. Except for filling of the slide area there will be no more hydraulic fill placed.

The uncompleted dam will be topped out by a rolled fill made from an excavation of the downstream face. The plan further calls for reinforcing the upstream toe with an additional berm. This berm will contain 8,526,000 cubic yards and will be on slopes of 50 to 1 and 7 to 1. Two million dollars has been allocated for this reconstruction plan.

The dam was supposed to be completed this year (1939), but due to the slide failure the work will be delayed another year. Then too, with the power generating units to be installed at Fort Peck, I guess we'll be hearing about the dam that is harnessing the old Missouri for some time to come.

.....

I have no doubt that when Adam and Eve
The Garden of Eden were forced to leave,
That Eve turned to Adam with face quite sedate
And anxiously asked him, "Is my leaf on straight?"

.....

Jake Jackson, a native of Georgia, was summoned to court on an assault charge. The State brought into court the weapons used -- a huge pole, a dagger, a pair of shears, a saw and a gun. Jackson's counsel produced the weapons used by the complainant, an ax, a shovel, a scythe, a hoe and a pair of tongs.

The jury was out but a short time, and returned with this verdict: "Resolved, that we, the Jury, would have given five dollars to see the fight."

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Handy Mathematical Short Cuts

By G. E. Woodward

Mr. Seaton wanted to know in one of our Center Lines if some of the fellows didn't have some short cuts and simple methods. I have three or four which may be of some use.

The first is a convenient method of computing the volumes of the ends of embankments in bridge openings. These are commonly staked as a wedge and two quarter cones and the volume is estimated by the following formula:

$R^2XHX.0097$ gives the cubic yards in the quarter cone, where H is the average height and R is the average radius. The sum of the two end areas X 1/2 the road bed X .037 = the cubic yards in the wedge.

* * * * * *

Another one is to find the acreage in any given area by computing the area in square feet, then multiplying this quantity by 23 and point off 6 places. The result is the area in acres. (The 23, with 6 places pointed off is obtained by reducing the reciprocal of 43,560 square feet to a decimal.)

* * * * * *

A third convenient formula is one to calculate water power quickly. This is given as:

Second feet X the fall in feet /11 will give the net horse power at 80% efficiency. (This is the result at the dam site and doesn't take into count the friction factors connected with a long pipe line.)

* * * * * *

To square any number under 100 in your head... I will illustrate this by an example and use the number 27. This will be squared in this manner:

Take the 20's by themselves and square them, making 400. Then take 7X20, twice, which gives 280. Then square 7 and you have the result - 729.

* * * * * *

There are many instances in making computations where you can multiply by dividing. For instance, when you multiply by 25, which is 1/4 of 100, divide by 4 and add two places. Example:

38X25 = ? .....38÷4=9.5 plus 2 places gives 950.

When multiplying by any fraction of 100 like $37\frac{1}{2}$, which is 3/8 or $62\frac{1}{2}$ which is 5/8, etc:

47X$37\frac{1}{2}$ is 47X3/8=1762.5

* * * * * *

These methods will speed up the computations in cross sections and you can get along without a yardage table. For instance, in the case of double end areas. Take two end areas like 938 and 756 and they are 36 feet apart. This gives the sum of 1694 but being 36 feet it is 2/3 of 54 and all we have to do is take 2/3 of 1694 and we have the yardage direct. 45 feet would give you 5/6 with which to multiply your sum. While 81 would give 3/2, etc.....

.....

STEVENS MADE HIM MOVE

Submitted by C. E. Shipman
Taken from ENGINEERING CONTRACTING (about 20 years ago)

Now that John F. Stevens, at one time Chief Engineer of the Panama Canal, and later one of the head officials of the Hill Lines, has gone into the contracting business, it seems a fitting time to rake up some of the events of his past career. At one time when Mr. Stevens was a Resident Engineer on the construction of a railroad in the west, his work was seriously hindered by the presence of an itinerant saloon, if you may call it so. The keeper of the saloon was warned several times not to locate his booze joint near the construction camp, but every time the camp was moved the saloon moved also. Finally Stevens decided to use something more likely to be persuasive than threats. Right after payday, when the saloon was crowded with workmen busily getting rid of their wages, Stevens walked into the place and said:

"Casey, you have been told four times to move away from this camp and you haven't moved yet."

"No, and I ain't goin' to. I ain't on the railroad right of way. This is government land I'm on and nobody but the government kin put me off. Just roll that into a cigarette and smoke it."

"I give you exactly twenty-four hours to pack up your liquors and get out," replied Stevens. "If you aren't gone then, you will find out that there are forces besides the government that will make things move around here." Turning on his heel, Stevens walked out. Twenty-four hours later, several hundred men had congregated at the saloon to see the fun. In fact, mighty little work was going on "down the line," for Casey had sworn that all hell wouldn't make him move, and the men knew that Casey was a fighter. They also know that Stevens was not a bluffer, and that Casey's hand was going to be called at the appointed hour.

The saloon looked like an armory. Behind the bar stood Casey, flanked right and left by several husky "barkeepers." Pistols stuck out of their belts and sawed-off shotguns loaded with "buck" hung conveniently from the wall. Men walked in and took a drink -- it might be the last one for weeks, and then again it might not. Casey himself was in savage good humor. Certainly things looked bad for the "Chief."

Punctual to the minute, Stevens swung into sight of the crowd, not at the head of a cavalcade of special police or of picked men of his own, but alone. He rode a large black horse and appeared to be unarmed. The crowd parted and he brought his horse to a stop at the door, dismounted and asked one of the men to hold the animal. Walking to the door of the saloon, Stevens looked in upon Casey and his arsenal. "I see you are still here, Casey."

"Yes, and by hell, you'll see me here still for some time yet, Mister Stevens."

"I hope not for very long," said Stevens, pulling a package wrapped in brown paper from his pocket. From one corner of the package protruded a small rope or cord about the thickness of a lead pencil, and against the end of this cord Stevens now placed his lighted cigar. "Hell," yelled one of the barkeepers, "It's dynamite," and forgetting all the power of his own powder-encased in pistol cartirdges, the barkeeper made a rush for the rear door.

"You are a good guesser, my friend, and unless I'm mistaken there's enough of it here to move this whole building and its contents without any of the government assistance that Casey would have me invoke. There she goes." Stevens tossed the package into the middle of the bar room, turned and mounted his horse, and shouted the well known warning that precedes a railroad blast -- "fire'."

Those who had come to scoff did not remain to prey. The running was furiously fast, and about the fastest, certainly the most furious, of the runners was Casey. Bold as he was, he had not dared risk the time to ascertain the length of the fuse inside that brown package. The roar of exploding dynamite sped them all on faster for a moment and then they turned to watch out for and dodge the falling fragments.

"It was a grand sight," as one of the men afterward said, " a grand sight, but it seemed a pity to send so much hell-water to heaven where everybody's on the rain wagon and can't appreciate good liquor."

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LOYALTY

If you work for a man, for Heaven's sake work for him. If he pays you wages that supply your bread and butter, work for him, speak well of him, stand by him and stand by the institution he represents. If put to a pinch, an ounce of loyalty is worth a pound of cleverness. If you must villify, condemn and eternally disparage, resign your position, and when you are outside, damn to your heart's content. But as long as you are a part of the institution do not condemn it. If you do, you are loosening the tendrils that hold you to the institution, and the first high wind that comes along, you will be uprooted and blown away, and probably you will never know why.

.....Elbert Hubbard.

.....

Then there was the traveling salesman who lost his country home because "that damn instrumentman will be there all summer or until that project is finished."

.....

THE FORT PECK INDIANS

By H. A. Morley

They tell me the topic of an article which I am supposed to write is the Fort Peck Indians. It is a good thing none of the Fort Peck Indians will have a chance to see the Centerline, if this article is printed, for I heard it stated, long before I ever thought of coming to this part of Montana, that the Fort Peck Indians were a bunch of renegades and outcasts who could not be controlled and who were not wanted on their original reservations. However, after living on the reservation for the past twenty years, I have decided they are no worse than a lot of people I have met other places, not all Indians either.

The old Indians of the reservation tell us that originally there were two tribes or bands located in northeastern Montana. The Yankton Sioux who migrated here from the Dakota Plains because of the drought there and the crowded condition and the scarcity of good hunting, and the Assiniboines who were a friendly and non-aggressive band who left Minnesota because of the warring tribes who were after them most of the time. Both bands were small, friendly and peaceable so they got along together, but had to band together in order to resist the raids of the Crows, Cheyennes and others who, finding out what a good territory this then was, wanted it for themselves. At that time they occupied northeastern Montana, both north and south of the Missouri River and as far west as the west boundary of the Fort Belknap Reservation, which today is occupied by Assiniboine Indians.

The original Fort Peck, occupied by U. S. soldiers, was on the south bank of the Missouri, just above the site of the Fort Peck Dam. Later, when the Fort Peck Reservation and the Fort Belknap Reservation were laid out, Poplar became the headquarters for the Fort Peck Reservation. Troops were also stationed there for some years. The boundary of the Fort Peck Reservation was the Missouri River on the south, the Porcupine River on the west, the Big Muddy Creek on the east and the north boundery was a line about 40 miles north of the Missouri River, extending from Porcupine to the Big Muddy.

These Indians, being peaceably inclined, devoted a large part of their time to stock raising, having large numbers of horses, and even after the reservation was organized, roving bands of hostile Indians used to raid their herds. One old Indian tells of one raid in which a band of Crows swem a herd of horses across the Missouri River just below the present bridge just east of Wolf Point. Several points on the reservation have been pointed out as the sites of battles with raiding bands of hostile Indians.

Many of the Fort Peck Indians enlisted in the regular army of the United States, and many others were scouts for the soldiers. Many of the chiefs were quite noted characters in their day, and a few of these old chiefs are still alive. A few of them fought with Sitting Bull in the battle against Custer's forces, although most of them were friendly to the whites. After the battle of the Big Horn, Sitting Bull and some of his army retreated to this part of the state and later were driven into Canada, north of here.

In 1908 the reservation was surveyed, the Indians were enrolled and the process of allotting land to each of them was started. This was finished in 1913, at which time plans were made for throwing the reservation open to Homestead Entry. All dry land areas, not allotted to the Indians, could be filed upon by homesteaders. Practically all available homestead land was taken up and re-taken up, by 1930, and no more allotments were available for the Indians. Then came the dry years. The homesteaders were unable to pay the appraised valuation of their homesteads, even after payment had been deferred many times by the government. Finally a large number of these homestad entries were cancelled, others bought up by the government, and this land allotted to the Indians having been born after there was no available land for allotment. Despite the statement "Lo the poor Indian," the agency records tell us that at the time the original roll was made there were approximately 1800 Indians on the Fort Peck Reservation, whereas today they show over 2600. This would indicate that the Indians of the reservation are doing their bit for posterity, in numbers at least.

Riding over the reservation today, it is hard to believe that this was once a game paradise, or any other kind, but some of the real old timers, both whites and Indians, tell us that this was the case. Vast herds of buffalo once roamed these hills and prairies. Deer were plentiful at one time since I came to this part of Montana, to have General Hugh L. Scott as a guest at dinner, at which dinner the main course was wild grouse. General Scott had been through this part of Montana in the early 70s and told us that all kinds of game abounded, and that they had shot game birds without leaving their wagons, and about their having eaten so many of them that they would no longer shoot them.

We are told that when the Great Northern Railroad was built through this part of Montana, many Indians were employed in the construction thereof, and were among the best workers. Then when game began to be scarce, the government decided to start issuing rations and clothing to the Indians. The Indians, in turn, were smart enough to decide that as long as the Great White Father in Washington was going to make their living for them, it was no longer necessary for them to work, so they quit just as many whites have done since receiving government aid in the past few years. Today the government is taking a different stand with its Indians, and we see large crews of them working on roads, building dams, and doing a great many other useful things, which above all else, is again teaching them to work for a living and enjoy it. They are more prosperous today than they have been for many years, and many of them are now raising grain and garden stuffs for themselves instead of sitting down and waiting for the wagon to bring them something to eat and wear, as many of us are doing.

Did I start out to write about the Fort Peck Indians? Guess I better stop before I get too far off the subject.

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EARLIER DAYS IN DIVISION FOUR

When Division Four's material came in for this issue, we were a bit disappointed by the lack of articles concerning the history of that locality. That portion of the state is rich in lore of bad men, Indians and early-day Montanans, so we browsed around the Historical Library for a while and picked up a few facts which we believe you will find interesting.

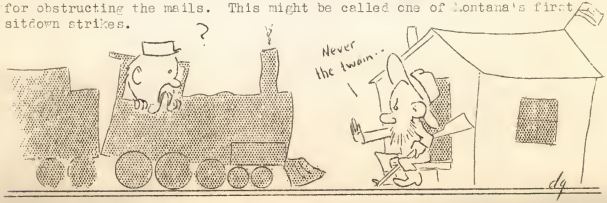
Sheridan County, one of Montana's youngest counties, was named in honor of General Phil Sheridan, who for a time commanded the Military Department including Montana during a period when much Indian fighting occurred. This county was created March 11, 1913.

The first log house in the Plentywood region was built by Guy and Coy Moody in 1897. In 1899 David J. Bradford drove some stock over from Lewistown and settled at Medicine Lake. The region developed slowly due to inconvenience of access, and was devoted mainly to cattle, sheep and horse raising until 1908, when the wave of homesteaders arrived to make this section one of the state's richest wheat sections.

Plentywood is said to have been named by an early settler who found a small pile of wood or a few trees on an otherwise barren stretch of prairie. Others say the name is of Indian origin.

Indian trouble was not serious in this territory, but it abounded with gangs of horse rustlers, notably the Jones and Nelson gang, Tommy Reed, Billy Dull. Many Indian relics have been found here, in fact farmers have cursed the teepee rings which interfered with their plowing until removed.

Queer characters are found on any frontier, and Sheridan County had a dandy. A gentleman called Hominy Thompson, who had been jilted in Indiana, sought solace and solitude in Montana, the better to hate and shun females. He arrived here in the early '90s and when the Moodys arrived in 1897 he up and crossed half the county to demand that they leave. He couldn't see why, with all the boundless country around, they had to settle practically on top of him. They remained, however, and other settlers moved in. Thompson remained aloof until the railroad came, and this was too much for his outraged dignity. The line built across his land and wouldn't pay the price he asked. One night he moved his shack to the line, tore up a few sections of rail and placed the house in the opening. Thereupon he hoisted a pole bearing the American flag, and set in the doorway with a rifle across his knees. Service on the road was held up for two days until the U. S. Marshall arrested him for obstructing the mails. This might be called one of Montana's first sitdown strikes.



The Great Northern line was built to Plentywood in 1910. Until the drouth years durin the war the era was one of hysterical prosperity. Crops were so plentiful that elevators couldn't handle all the business. Nor, glittering banks loaned money to anyone who had acquired title to land. It is said that some farmers sold individual crops for figures in excess of the President's salary.

Sheridan County was created from Valley, and later Daniels and Roosevelt Counties from Sheridan. Plentywood was made the county seat by election in 1914, although contested by Medicine Lake in court fights for years.

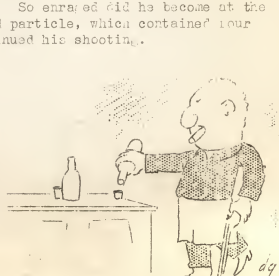
Daniels county was named for Mansfield A. Daniels, an early rancher and storekeeper of this section. Scobey was built on its present site in 1914. Agricultural activity is foremost, of course, with wheat being king. In 1924 the estimated per capita wealth was $1,100, derived from agriculture, poultry, coal, and dairy products.

In 1916 a check was issued to a farmer for $29,000 for a single shipment of flax. Up until that time it was the largest single grain check known to have been issued to an individual farmer in the United States.

McCone County was named in honor of State Senator George McCone, a leading stockman of eastern Montana, who was in the legislature at the time the bill was passed which created the county, April 1, 1919. Roosevelt county of course was named for Theodore Roosevelt and was created in 1914 also. Phillips County was named for Benjamin D. Phillips, State Senator, prominent sheep man in northern Montana, and father of State Highway Commissioner Walter Phillips. It was created February 5, 1915.

No account of this country would be complete without mention of Pike Landusky and Kid Curry. Landusky claimed to be half French and half Polish, and arrived at Fort Benton by steamer in 1864. He had a powerful build and was given to fits of uncontrollable violence and rage. As a green kid he was unmercifully taunted by toughs, until one day when he was insultingly asked "where be ye from" he smashed his interlocutor to the ground with a terrific blow and shouted "From Pike County, Missouri, by ---!" The name and reputation stuck, and until his death he was variously feared and admired. During a fracas with a few Indians at a trading post, a bullet splintered his jaw. So enraged did he become at the pain that he jerked loose the fractured particle, which contained four teeth, and threw it to the floor, continued his shooting.

After a period of trapping, during which time he had frequent scrapes with Indians and became a sworn enemy of the Sioux tribe, he returned to the Little Rockies in 1867 and prospered at his ranch at the mouth of Alder Gulch. The camp of Landusky was the center of a wild and lawless country and inhabited by such characters as Jaw Jake, a saloon keeper who had been permanently injured by a shot in the leg and used a Winchester rifle as a crutch. It



was in Jew Jake's saloon that Pike, after a sound beating by Kid Curry, inadvertently reached for his hip and was subsequently drilled by the Kid. Witnesses later reported that Pike was unarmed and had merely reached for a handkerchief to wipe away the blood from his face. Curry had shortly before, been in the custody of Landusky who had been appointed a deputy, on a charge of some kind, and was said to have been humiliated and bullied to such an extent that he swore revenge.

Pike Landusky was a Dr. Jekyl and Mr. Hyde of the frontier. Any honorable man claim he wasn't as bad as he was painted, and had many good qualities, not the least of which was a great generosity with friends.

KidCurry later robbed a Great Northern train single-handed of an amount reputed to be between $60,000 and $160,000. He was never apprehended.

The camp of Zortman dates back to 1862 when L. K. Devlin of Havre staked out some claims. No development took place until the area was withdrawn from Indian reservation. Devlin, according to one account, sent Pete Zortman to the territory, where he discovered Alder Gulch pay dirt and founded the camp bearing his name.

This was a rich gold country, and the second largest cyanide mill in the world was located near Zortman.

.....

"Deacon White," said Parson Jackson softly, "will you lead us in prayer?" There was no answer.

"Deacon White," this time a little louder, "will you lead?" Still no response.

Parson Jackson made a third appeal and raised his voice to a high pitch that succeeded in arousing the drowsy man. "Deacon White, will you lead?"

The Deacon in bewilderment rubbed his heavy eyes and blurted out, "Lead yourself, I just dealt."

.....

"May I -- may I kiss you dear?" said he.
"First I want one thing made clear," said she,
"Have you e'er kissed a maid before, or tried?"
"No," he answered. She was sure he lied.
Then with willing lips she whispered, "Well,
Yes you may, since you don't kiss and tell."

.....

Robert G. Shirriff has resigned his position as Laboratory Assistant in the Testing Division to return to school. Bob, a graduate of Montana State, is working for his Master's degree in Chemical Engineering at Armour Tech.

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OPERATORS' DAILY EQUIPMENT RECORDS

By C. E. Shipman

The following remarks on how Form 901 is handled in Division 4 are submitted, not that the methods outlined are necessarily ideal, but with the thought that in other divisions some better procedure may be followed which, if brought to light would help out all around. With some 300 to 400 reports per week coming into the division office to be checked and forwarded to Helena, it is essential that some regular system be followed. The system as outlined below apparently produces fairly satisfactory results for the reason that to date, very few of our reports have been returned by Helena for correction or explanation. (Knock on wood).

The writer had his first experience in "checking" things some thirty-odd years ago in a bridge office, where, in checking bridge details, everything is assumed to be wrong until it is proved to be correct. Therefore, in going over Form 901, everything is looked at with a very critical eye to detect mistakes, errors, and just plain "boners." It is also kept in mind that some of our equipment operators, while no doubt top-notchers when it comes to handling trucks and graders, are apt to be just a trifle weak when it comes to arithmetic, bookkeeping and clerical work, and their submitted reports will bear looking into with a rather critical eye.

When a flock of reports are received, either through the mail or deposited in the report box in the Shop, they are first arranged in the official "order" for equipment, first the automobiles, then the light trucks, heavy trucks, graders, puddle-jumpers, team patrols, snow plows, cats, rollers, brooms, tar pots, mowers, trailers, etc., and in both numerical and chronological order. The speedometer readings "in" for the last report is then checked against the reading "out" for this report, which occasionally finds an incorrect reading carried forward, especially where the equipment is driven by different parties. It also occasionally detects a day's report which is missing altogether. The day's mileage is then checked and an arithmetical error occasionally discovered. Then the "timeout", "time in", total equipment time" and "hours worked" are checked. It is rather surprising the number of errors made in figuring the elapsed time from 7:40 a.m to to 5:15 p.m. Also, a few operators overlook the instructions that "hours used" should check with "total equipment time" less the lunch hour and less time lost due to breakdown, and will report "total time" as 9:30 and "hours worked" 8:00 when it should be 8:30.

Then the "authorization" and "code" are looked at critically and any charge that appears to be incorrect is referred to the Maintenance Foreman for approval or correction. Errors in the charges are to be expected, particularly on Special Maintenance, and especially where there is an alphabetical break-down. Also, as has happened more than once, when a "21" charge comes in on a maintenance section where there is nothing but oil, when a "24" charge comes in which does not involve additional forces, and when a "32" charge (for sanding icy roads) comes in in July, they are evidently incorrect and are referred to higher authority for the proper charge.

Attention is then given to the gas and oil reported used. In this division office the triplicate, or yellow copy of the monthly payroll is not used, and these sheets are used on which to tabulate the gas and oil reported used by the equipment, gas on one sheet and oil on another, 14 pieces of equipment on each sheet, and the dates at the top changed from the payroll month to the calendar month. At the end of the calendar month, the gas sheets are turned over the division Gas Distributor for use in preparing his Monthly Inventory of the CA-56-4-03 account, and the oil sheets are turned over to the Division Clerk who prepares the monthly CA-56-4-04 account. Discrepancies are nearly always discovered, and must be reconciled between the gas and oil reported on the daily equipment reports and that reported on the gas and oil station sheets.

Finally, the tire changes are checked, and any reported are recorded on the Tire Record cards, Form 117. The reports are then filed in a box made for the purpose by the Shop, 4-7/8 inches wide, 7-1/2 inches deep, and 12-1/4 inches long, inside dimensions, in the official order and behind index cards with the number of each piece of equipment thereon, the reports for each piece in chronological order. Five times a month, the white reports are gathered up, holes punched therein and bound together with No. 6 Star Fasteners, and mailed to Helena. At the end of the calendar month, the yellow copies are gathered up, the reports for each individual piece of equipment stapled together, and all the reports for the month tied together, labeled, and filed away in a cupboard upstairs to accumulate dust and no doubt be destroyed some time in the dim distant future.

As samples of the errors and omissions to be expected, the following came over the desk this morning: One operator reported correctly his total equipment time 10 hours and his hours used as 8, when it should have been 9. Another operator omitted both his name and the date. Another failed to give the day's mileage. Another stated that he was working on shoulders and charged it to "22" when it should have been "23". Another subtracted his mileage out, 4345, from his mileage in, 4391, and got 56. Such mistakes are not confined to the men in the lower brackets, but once in a blue moon a bull will be found in a report submitted by one of the white collar contingent. And then again, the checker himself will sometimes stub his toe and let something get by him that is evidently incorrect. If we didn't all make mistakes, the department wouldn't require so many erasers.

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Mr. and Mrs. L. P. Giese (Testing Lab) are the parents of a girl born September 16th.

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TO SCHOOL

John J. Mitchke, Jr., Gravel Checker, Div. 2, to St. Louis Medical School.

Ashton O'Donnell, Gravel Checker, Div. 2, to Whitman, Walla Walla.

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DUCK FARM

By
Bob Templeton

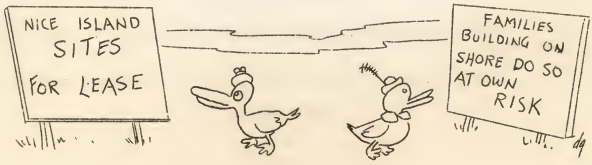
First I wish to express my appreciation to Mr. Thomas Horn, Manager of the Medicine Lake Bird Refuge, for the information he supplied me in order to write this article and next I want to dedicate it to all those fellows who, in previous issues of the Center Line, wrote such interesting articles on the art of fishing -- and me a lover of that sport living in a country where the only fish for hundreds of miles around are pickled in tin cans in the local grocery stores.

Back in 1933 the government purchased a small mud hole in the northeastern part of the state for the purpose of encouraging production of migratory water fowl. Everyone who has been in this part of Montana knows that the mud holes, or lakes as they are sometimes called, would certainly make terrible excuses for summer resorts. They are fairly numerous but shallow little things that dry up when the hot weather comes and leaving a ring of alkali in the ground that makes a very poor place for ducks to hatch eggs and raise their young.

When the lake was purchased it had a water area of about 1500 acres but it was far from being an ideal place for nesting ducks as there was little food for them and quite a number of predatory animals such as skunks and weasles that destroy the birds' nests.

Of course, the first thing in building up this refuge was to establish buildings for the employees and next a CCC company for enlarging the lake and improving the grounds to make it more suitable as a breeding grounds. The original lake itself was not enlarged but merely dammed at the outlet to insure having water all summer. Then a similar dam was built at the head of the lake, which naturally was to create another lake above the original one. Several dams have been built in this manner so at the present time the last of these artificial lakes is eleven feet above the original. At present, the total water area is about 10,000 acres. The object kept in mind all the time while building the dams was to make lakes with a large water area rather than deep ones as the shallower lakes make better breeding grounds since weeds and grasses thrive in shallow water.

All around the shore of the lakes there has been channels cut at every convenient place to make small islands. This is done as the birds prefer islands to the shore so the predatory animals cannot get to their nests. Of course there are no signs hung up for guiding the birds or telling them the reason for nesting on an island. They are clever enough to know that either by instinct or some other reason.



Besides the islands made by cutting channels in the banks of the lakes there are man-made islands in various places in the lakes. These artificial islands are not just a pile of dirt dumped into the water but are rather scientifically built. For instance gravel on a low island will cause tern, gulls, and pelicans to nest while crested wheat and gamma grass will attract cadwalls, pintails and blue wing teal. Mallards prefer wild roses, snow berries and Russian thistles, and redheads, canvasbacks and ruddy ducks nest in bullrushes in shallow water. Geese nest in bullrushes on the shore.

When the refuge was first started, it produced about 4,000 young birds annually, while now it produces approximately 50,000. The government also cultivates different types of grasses along the banks of the lakes for food.

Throughout the summer the birds seem well satisfied and perfectly at ease with the whole world. The highway goes through the center of one of the lower lakes and when a car goes past there may be one or two birds near the road that will raise up and fly a short distance, but then settle right down again. But now that the weather is getting cooler and the skies are getting increasingly cloudy, the birds seem to get restless and quite often a flock of birds will band together and fly short distances around the lakes as if they were getting prepared for their journey southward for the winter. It seems strange that no matter how restless they get, they will not leave their nesting places until a storm drives them out, and even then they will only fly until they come to a spot which is a little less stormy.

It will be but a short time now that a lot of these ducks the government has so carefully mothered will take on a different appearance. They won't have any feathers on them but they will be nice and brown and tender. And with them there will be mashed potatoes and brown gravy and sweet potatoes and cranberry sauce and pickles and olives and onions. And possibly even a Martini or two will add to their appearance.

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Herb Kuphal, Resident Engineer at Missoula and top flight amateur photographer, had one of his pictures used in a recent issue of The Highway Magazine. The photo was taken along the Flathead River on Route 3 in Sanders County near Paradise.

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Don Gough, CENTER LINE artist and illustrator, is acquiring more than local fame by reason of his deftness with the pen and his originality with ideas. The latest magazine to publish one of his cartoons is The Highway Magazine.

Don had really crashed the big time when a cartoon was accepted by Judge, and it was a heartbreaker that that magazine folded just before the drawing was to appear. And then there is that certain middle West smoothie that actually pilfered from our cartoonist. Are you listening, Puddle Jumper?

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1939 Montana National Bituminous Conference
Sun Valley, Idaho
By "Slick" Flaherty

The Fifth Annual Montana National Bituminous Conference was held September 11, 12, 13, 14 this year at Sun Valley, Idaho, situated in the midst of the snow-peaked Sawtooth Mountains. This spot, in the opinion of the writer, is an ideal location for a Conference of this size.

The Conference this year was, from a point of discussion and solution of problems vital to the design, construction, and maintenance of bituminous highway surfaces, larger and more worthwhile than any previous meetings inasmuch as those in attendance were mostly highway engineers and asphalt technicians.

The total attendance this year, however, was not so large as previous meetings, although 22 states, the District of Columbia, and Canada were represented.

This year's meeting introduced two new sections which were of great interest to the entire group. The first of these was "Safety on the Highways" and was covered very well by an address by Dr. Ralph L. Lee of the Public Relations Staff of General Motors Corporation. Dr. Lee was exceptionally well qualified to discuss problems on safety on the highways and brought out many points which are not usually given the consideration that Dr. Lee stressed.

The second paper on this subject was given by Prof. R. A. Moyer, Research Assoc. Professor in Highway Engineering at the Iowa State College and was written from a technical standpoint entitled "The Importance of the Design, Construction and Maintenance of Bituminous Highway Surfaces to National Highway Safety".

The second of these new sections, "The Highways of Tomorrow" was covered in a paper written by Chas. M. Upham, Engineer-Director of the American Road Builders' Association at Washington, D. C. Due to Mr. Upham's inability to attend the meeting, his first assistant, Mr. W. C. Slee, attended and read the paper.

Prof. F. C. Lang, Engineer of Tests, Inspection and Research of the Highway Department Laboratory at the University of Minnesota, wrote the paper on this subject from a technical standpoint, but was also unable to attend. Mr. H. H. Houk, with the Washington National Airport at Gravelly Point, D. C., and former Chief Engineer of the Alabama Highway Department, consented to read Mr. Lang's paper.

Prof. W. S. Housel, Research Consultant, State Highway Laboratory at the University of Michigan, chairman of the section on "Research as Applied to Construction and Maintenance of Bituminous Surfaces", read his committee report and led a very excellent discussion on the problems of research.

The second section, "Fundamentals of Bituminous Construction" was headed by J. E. Buchanan, Dead on Engineering at the University of Idaho. Dean Buchanan presented his summary of the papers prepared and led the discussion on Fundamentals.

The third section, "The Design and Construction of Bituminous Surfaces" was very ably conducted by Mr. C. F. Seifried, Office Engineer of the Wyoming Highway Department. Mr. Seifried presented his summary of all papers prepared on his section and carried on an interesting discussion period.

"Maintenance of Bituminous Surfaces" was covered by the summary of papers prepared by Chairman T. R. Perry, Bituminous Engineer, Iowa Highway Commission, who also followed the presentation of the summary with a period for discussion of maintenance problems.

The last section on the Conference program was a Round Table Discussion. This discussion was presided over by Mr. F. V. Reagel, Engineer of Materials of the Missouri Highway Department, and covered all points of bituminous highway surfaces on which anyone might wish further and detailed discussion.

The entertainment program consisted of many and divergent forms of amusement. One of the highlights of the entertainment program was the rodeo held at the Sun Valley rodeo grounds, and featured Monte Montana and his troupe on the afternoon of the second day. Each person was given a ten-gallon hat and neckerchief which added to the western rodeo atmosphere.

In addition to the rodeo other entertainment facilities were available to the Conference guests and included a ride on the ski lift up 3600 feet to the top of Proctor Mountain, golf on a sporty grass course, bicycle riding, swimming in outdoor enclosures, tennis, skeet, and lawn games.

The Conference meetings were well attended and with the relaxation provided the guests, the entire meeting seemed to be much enjoyed, as well as profitable and instructive to every delegate in attendance.

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Gene Berry, Laboratory Assistant, has resigned to accept employment with a sugar outfit at Chinook.

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Jess Butzlaff, Division Mechanic at Wolf Point, and family spent their vacation on Whitefish Lake. They took the boat with them, and most of the time was spent in fishing.

Albert Berndt and family spent their vacation in western Montana and northern Idaho with relatives. Came back with some tall fish stories which we all believed quite readily but doubt very much the one about 35 miles to a gallon of gasoline. How are we going to build roads with mileage like that?

Ed Cody took his family to the west end of the state and he claims the car ran so good that they went on to Seattle and points in Oregon.

Although a little late, we wish to report that D. J. Healy, Acting Division Clerk at Wolf Point, has been boasting about the New Boy born July 12th. He weighed seven pounds at birth and Don reports that he is the cutest baby he has ever seen.

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THE NEW AXEMAN
by
Walt Koester

Note: This is a true story of the conversation by a green Axeman on a Survey Crew.

The first morning out on the job, the Instrumentman hands the new Axeman a sack of stakes and a piece of keel before he has a chance to explain the duties of the new assignment. The first question asked by the Axeman is something like this: "What am I to do with these pegs and the thick blue pencil." Of course this draws a hearty laugh from the seasoned Chainman. The use of the pegs and thick pencil are readily explained by the more intelligent Rodman. As the work gets under way, our new friend unwittingly inquires as to the use of the red and white javelin. This is tactfully explained and the work progresses for an hour or two without any more serious trouble. After the first P.I. was set the Axeman said that he would like to hold the back end of the line while the P.T. was being set, but due to the lack of experience, this was not allowed.

During the noon hour he happened to see the level rod in the truck and being the "willing to learn type" inquires as to when they will be using the Bar Reading that he had discovered. The afternoon progressed with little or no difficulty. At the end of the day the Instrumentman made the remark that he was tired, while putting the transit away. The Axeman immediately remarked: "Why you shouldn't be tired after looking through that transom all day."

A few days later, the Gang went out to take some elevations for high water. The next day, while going by this same place, the new Axeman was heard to remark: "Isn't this the place where we put that water bench yesterday?" The same day he came to the conclusion that it would be easier to drive the pegs with the axe instead of the Mullett. From then on the work progressed with few new expressions except for the reference to the pendulum. Upon further questioning from the Instrumentman, it was explained that the pendulum was more commonly called the Plumb Bob and Plumb Bob would be understandable by the rest of the crew.

With the field work completed, the boys worked in the office. The Axeman, now an old head in the field work, was told that constants were put in the calculator instead of tangents when figuring areas but the lad shook his head and said: "Well, if you say so."

Since no new work has been done, there is very little more to tell but "Axie" should be a dandy when it comes to working up the Finals. He will probably think that this last operation will determine his rating as he is fresh out of school and Finals meant nerve-racking examinations.

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D I V I S I O N F I V E N E X T M O N T H, H. C. T. ! ! !

SIDE SWIPES

BY PSYNUS

What's the latest - dope?

Half of all U.S. undergraduates flunk out and most colleges stop worrying about them. University of Minnesota's General College believes that this large group should at least make competent citizens. Dean MacLean undertook to find out all he could about his students. To find out what they would need to know after college he questionaired 951 Minnesota alumni and alumnae aged 23 to 48 with results as follows:

Most had an income of $1,800 to $2,500. Most liked their jobs, found bosses congenial. More than half were dissatisfied with chances for advancement.

Things they most needed to know in their jobs were how to write business letters, how to plan work for others, how to prepare statistical reports, how to interpret economic trends. One-fourth needed to know how to make a speech. Nearly half kept a budget; three-fourths had financial plans, often inadequate, for their old age.

Most frequent causes of disagreement between husband and wife were management of the family income; relatives. Married men and women often rearranged their furniture, wanted information on how to make their houses comfortable and attractive. Most common methods of managing children were reasoning (65%) and spanking (50%).

Most frequent spare-time activities were -- reading newspapers, conversation with family, hobnobbing with cronies, listening to radio (news, football games, Charlie McCarthy), reading magazines (favorites -- Reader's Digest, Time, Life).

Things people would have liked to do but seldom had time for were -- sports, literary writing, travel. Men most wanted -- a happy married life, financial success, security for old age, a comfortable standard of living, making a good home. Women -- a happy married life, a comfortable standard of living, making a good home, children they could be proud of, travel and adventure.

82% voted. 85% discussed politics and social problems with guests, 69% with families, 63% with fellow workers. Pollees were especially apathetic about municipal government and similar local affairs.

Said Dr. MacLean: "It is appalling to discover that there are few, if any observable differences, in other respects than earning power alone, between the graduates and non-graduates and between those who in college were known as "good" students ... and those who were known as "poor" students."

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The following is going the rounds with a new tag at every telling. We'll tag it this way: The stranger was stuck in the small Montana village for the night. Seeking diversion he interviewed a local yokel, "Got a movie show in town?" "Nope," said the native. "Any baseball or basketball or jitterbugging?" After another negative answer the stranger in desperation asked, "Well, what do you folks do for amusement in this town?"

"Well," said the yokel, "there's a Highway Project out here a few miles and we watch the engineers that come to town every evening."

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A vacuum sweeper for leaves on the lawn makes the place tidier and utilizes plant food wasted if leaves are burned. A revolving cutter minces the leaves.

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"Out here," boomed W. C. Fields, "there's no way of knowing where the D. T.'s leave off and Hollywood begins."

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Dog lovers find food for thot in this ominous query in a Tailwagger ad: "Does your Dog have D.O. (Doggie Odors)?" They are warned: "D.O. is a monstrous setback to a dog's personality."

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A new lectric iron holds a pint of water which, when it turns to steam, emerges thru small holes near the point of the iron, dampening the material before it presses. It thus eliminates sprinkling and use of a damp cloth in pressing.

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Concrete made with sawdust instead of sand is only a third as heavy as the ordinary kind, and is also strong, water renellant and fire resistant. It takes nails and screws, can be sawed with an ordinary saw and is easily finished to a smooth surface. The sawdust, preferably white pine, spruce or hemlock, should be coarse, screened to remove large pieces, and not less than a year old.

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Attributed to many prominent personages and several nationalities is the well-worn following:

First person: "You're neutral, aren't you?"

Second person: "You bet."

First person: "Who are you neutral against?"

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Firestone has perfected an X-ray machine that will look thru your tires, without removing them from the car, and show up nails, tacks, glass, even breaks and pinches, before they cause the dreaded blowout or flat.

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Last word in adventure comics, "Superman," is rapidly becoming the No. 1 juvenile vogue in the U.S. A happy combination of Flash Gordon and Popeye, Superman is an individual with the speed of an airplane, the strength of a locomotive, the leap of a cricket and the hide of a man of war. Since the eight months of his daily comic strip existence, Supermen clubs have been formed in the cities. In Milwaukee one enthusiastic young Superman fan jumped off the roof of his house and survived. A reader wrote to the Philadelphia Inquirer suggesting that Superman be sent to clean up Hitler.

Hardly less infantile is many of the opinions one hears experessed on the way to wage the War and how to maintain our neutrality. It is hard to believe we learned anything from the last war.

If the comics, movies, radio programs, magazines, art, novels and music that apparently make the greatest appeal to the greatest number is any criterion, we are a nation of wishful thinkers and ripe for war and its following "isms".

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One super-diligent radio engineer stayed on the job for 48 hours straight, following Hitler's epochal Reichstag speech. Someone finally made him go home. When he had been asleep only an hour, his telephone rang. "This," said a velvety voice, "is the Crosley radio survey. Will you tell me what program you have been listening to?"

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British Tommies reworded the work carol of the Seven Dwarfs in Snow White and, as they moved toward their posts in the Maginot Line last week, sang: "Heigh-ho, heigh-ho, it's off to war we go."

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Curves & Angles

Mrs. Bennett MacIntyre (nee Katherine McCarthy) and Mrs. Glenn Jones, formerly Helen Finn, were honored guests at a no-hostess luncheon given by the girls in the highway building early in September at the Montana Club. Both brides were presented with a wedding gift and a lovely corsage. Kay is now making her home in Anaconda, while Helen lives in Helena and is still employed on the switchboard by the highway department.

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Peg O'Grady, who recently underwent an operation in Rochester, Minnesota, is reported to be getting along nicely and will soon be back in our midst.

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We can't decide whether or not Mary Morris was fortunate in being able to attend the Bituminous Conference at Sun Valley. She is the envy of all of us as far as the pleasure end is concerned, but as usual Mary was up to her ears in work at that conference and we wonder if she managed to find a little time in which to enjoy the scenic beauties, etc., of the resort.

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Florence Reeser was called to Iowa the early part of September due to the sudden death of her father.

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Ruth Skinner and Mary Dimich spent Labor Day at Lethbridge and Waterton Lakes. Ruth was passing around some very fancy cigarettes she secured while there.

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Eve Kraft, of the Planning Survey, wishes that we would have another get-together. We're with you, Eve, and think it would be fun to have another party. How about a fall dance, or something?

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Marie Miles and Millie Dolin, of the Planning Survey, spent another of their numerous week ends in Anaconda a short time ago. We wonder just what the attraction is, or should we say attractions? They both seem very happy after their trips over there.

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SO THIS IS SAN FRANCISCO

How will I ever find my way about, I wondered, as we drove onto Market Street in San Francisco. It's quite a breathtaking place with its clanging street cars, automobiles jammed and swarms of people all in a hurry. However, the next morning the spirit of San Francisco was in my blood and that means you can accomplish anything.

For real adventure, travel by ferry to Treasure Island. The island looks quite majestic in the distance with the sun tower standing out against the sky line. We seemed to glide like a swan over the water, coming nearer and nearer to our destination, with a loud speaker telling us to be sure to buy guide books and get our tickets on the boat. The water foams up, the ferry creaks and gently stops.

Now for Treasure Island. You grope in your pocket book for your ticket. You are sure you have one somewhere. Triumphantly you produce it and pass through the gate.

What is that over there? Oh yes, a place to check your coat if you desire to be without one during the day. My, it feels good to have this suit on. This island is somewhat breezy. Your large droopy hat blows down into your face and you grab onto it, holding it down with an effort. Yes, quite a breeze. The candid cameraman hands you an envelope which you wonder much about and, after reading instructions, find you are to send 25¢ and receive your photo. My, what a picture that must have been with a terrific scowl on my face, trying to keep that hat on. No, no picture for me.

Now where shall we go? Each member of the party wants to visit a different place. All right, I'll travel by myself and see the fair. You get a very independent feeling in San Francisco. Away you go.

The Montana exhibit is what I must see. You feel very proud of the gorgeous scenery depicting Montana blue skies, riding on the range, beautiful water falls, and the old-time stage coach scenes, with the attending lighting effects, and the famous Montana smile of the attendant, all in accord with the Montana spirit.

The Science Building. What a big building, practically the largest exhibit at the fair. You read the signs: "Webster's Dictionary", "How to Train Children", "Revelation Tooth Paste", "What is your Proper Vocation", "Sex Harmones". What are those slides over there? Oh yes, they are pictures of operations. The methods used at the Mayo Clinic. You shudder, but gaze fascinated at the realistic, glassed-in pictures. You press buttons and find out what part of the body is affected by this and that disease. After pushing all buttons you decide you are really ill and have every symptom. Better leave those things alone.

"General Electric House of Magic". Oh, I must see that.

"Television". You are quite thrilled at seeing the attendant at the Court of the Seven Seas talking to the crowd. You see the crowd, hear and see the attendant, and he stands out quite clear, too. That is good.

The Bell Telephone Company's program has a very novel experiment, the talking machine. By pressing keys it produces sounds which duplicate

the human voice. Winners in the drawing contest are given free long distance telephone calls in demonstration of the telephone company's services throughout the country. The public is cordially invited to listen in on all conversations. Reminds one of those country telephones.

At 2:30 you listen to Eddy Duchin out in the open air pavilion.

Cavalcade of the West is then taken in.

You find yourself in "Follies Bergere"; beautiful girls, lovely lighting effects and gorgeous costumes dazzle you.

The Chinese Jade exhibit would make anyone marvel at its beauty.

The Norweigan folk dances are interesting.

Ecuador and all the southern countries appeal to your sense of romance. The music enchants you.

The Phillipine building with its beautiful hardwood floors, its chairs, bedroom suites, tables and all types of articles made from the beautiful Phillipine wood, is really exquisite.

You decide to ride on one of those funny little things on the water. Looks like a goose, and you paddle it with your feet. Too much work to ride on that and besides it's for youngsters, my friends tell me.

My feet are tired, but I still have too much spirit to ride in those carts as though I were an invalid.

The Art exhibit, everyone says, is marvelous. In you go. You listen to the American lecturer on art, thinking it will help you appreciate real art. He says that all artists disagree as to what constitutes art. After looking at various pictures you understand the reason why. You feel like arguing, too, over some of them. Now that one of King Albert is marvelous, but that horrid picture over there that won the second prize, wonder how they could have made that mistake.

It is getting chilly. Where is my coat? Oh yes, I left it at the entrance.

Why, what is happening around you? You are dazzled. You feel like rubbing your eyes like Alice in Wonderland. The green, yellow, blue and rose water terraces, the myriad fountains emitting sprays of rainbow water, the Tower of the Sun gives forth a rosy hue. The Statue Pacifica stands majestically by, viewing it all as though she was not surprised. The lights are on. Oh, this is heavenly.

We decide to dine in San Francisco. Everyone agrees that we will go to El Prado. We order a Caboose (champagne and brandy cocktail). The atmosphere seems exhilirating. The tall, handsome chef with his white cap fascinates you, and the cart he wheels around interests you, too. No wonder, it's our dinner. He gracefully lifts the lid off the steaming roast beef and before our eyes very deftly carves the meat. Everything appears by magic. The music makes you feel like you are in Vienna. Your dinner is delicious.

As you drop off to sleep that night you think, "And so this is San Francisco".

(The above was written by Fernetta Rice, of the Right of Way Division, following her vacation spent in San Francisco.)

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Katherine McLean, of the Planning Survey, is very happy and full of smiles these days. She is to be married on October 7 to Clarence Ratcheye, also of the Planning Survey.

Katherine was guest of honor at a luncheon given at the Montana Club on Thursday of this week by the girls of the Planning Survey and the Highway Department, at which time she was presented with a gift for her new home.

Best of luck and a long, happy life, Katherine and Clarence.

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REVOLT IN A FLAT

I shall stay in bed all day.
I am tired of making hay
While the sun shines. Let it rain.
Let it shine. My sullen brain
Needs a rest. I want to root
Here beneath my quilt and snoot
Capital. Nor wheel nor cog
Of progress shall dispel my fog.
I am tired of zeal and action,
What I want is stupefaction.

* * * * * * * *

Memoirs of a Highwayman's Daughter
By Her Father's Daughter

I was four years and a few odd days old when I became a H.'s D.-- thru no conscious effort on my part, it must be admitted. Therefore, quite naturally when I was just a little punk, roads had quite a vital place in my life - and that of my brother.

Our front and back yards looked considerably like relief maps of the Rocky Mountain district - that is, to a casual observer. To me and to the brother - they were roads - glorious roads - second to none. And as if dad hadn't seen enough roads during the day, he must come home at night and 'expect' the new section of 'highway' recently laid across the tulip bed. ('Inspect' as yet had not entered our combined vocabularies, so 'expect' served perfectly well, as, indeed, why not?)

Another entrancing part of the highway business as seen through young eyes - admittedly a little remote perhaps to you veterans in the business - was those lovely tall tables. You see, we were sometimes living in little towns where the 'office' was set up in a spare room in our living quarters. We then became quite vitally interested in what might be atop those terrifically tall tables - too high to hang our noses over as is the wont with small kids. Frankly I think I have climbed more tall stools than the oldest oldster in the business. (P.S.-They still fascinate me!)

And so my ever-active brain cell flashes to another interest consuming contrivance - the Traveling Vehicle. I know perfectly well, I could have said 'car' but in all honesty, I shall call IT a vehicle. You see, there were times when IT hung together by the skin of its baling wire - and we were never cautioned to keep our feet off the upholstery -- for the simple reason that to locate said upholstery was quite impossible.

We became positive vagabonds. Until my seventh year in school - we went to a different school each year - which became to us the accepted mode of living. Therefore, when we were finally stationed in one town for a total of eight years, the first two or three made us pretty uneasy. We felt positively 'bogged down'.

Now, with my more advanced intelligence (you snicker?), being a H.'s D. means one thing - being road conscious. There are people, I understand, who can go for what is called a 'pleasure ride'. Not so, me. Ahead I see only road - good road - bad road - and well, road. To my 'road-conscious' eye, I see where a curve might have been omitted, where a grade is a little steep, where the oil hasn't worn well on the edges -- and stuff. See what I mean? Someday I vow to go by pack train thru the Grand Canyon and forget therefore all about these ever-present road.

To come to a conclusion - as has been inevitable since the top of the page (did someone say 'fortunately?'), I could inform you that my dad has worked for the highway now for eighteen years - but I shan't. It would be a dead give-away as to my age, and being a woman, I instinctively shudder at such a betrayal...

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WOLF POINT UNDERPASS

By Harold Tilzey, Project Engineer

The major construction activity in Division No. 4 during the season of 1939 has been the concrete sub-way under the main line, passing track and the house track of the Great Northern Railway and the construction of 3.015 miles of connecting roads, the whole eliminating two existing railway grade crossings on U. S. No.2.

Under previous conditions, traffic coming west on U. S. No. 2 from Poplar crossed to the south side of the tracks about two miles east of Wolf Point, continued west through Wolf Point on the main business street and crossed back to the north side of the tracks immediately west of the city. This arrangement involved the hazards of two railway grade crossings and sending high speed traffic through a busy business district. Traffic coming from the south on Montana No. 13 and destined west on U. S. No. 2 also traversed the main street and crossed on the grade crossing west of the city. It was also necessary for the local auto traffic and pedestrians to cross back and forth over the west grade crossing when going from the business district on the south side of town to the residental section on the North side.

Upon completion of the underpass project, existing conditions will be: through traffic on U. S. No.2 will travel through Wolf Point on the newly constructed oil highway entirely on the north side of the railway track and through two blocks of a purely residental district. In case such traffic desires to enter the business section of Wolf Point for any reason, access can be had through the sub-way structure. West bound traffic from Montana No. 13 to U. S. No. 2 will be routed through the business district as at present and cross to the north side of the tracks at the sub-way. The sub-way will also provide a side walk on each side of the structure for the pedestrians between the north and south sides of town.

The contract for the sub-way construction, including the highway north of the track and necessary connecting sections, was awarded by the Commission on November 29, 1938, to Nolan Brother Inc. of Minneapolis, on their bid of $197,342.45, who in turn sub-let the new highway and part of the connecting sections to the C. A. Wagner Construction Company of Sioux Falls, South Dakota. Completion of the entire project is due on or before November 30, 1939, and present indications are that this time limit will not be exceeded.

The Wagner sub-contract called for the construction of about 3 miles of 30 foot roadway complete with 12 inch sub-base gravel and 2½ inch oil treated crushed gravel surface 24 foot wide, together with two treated timber bridges over Porquipine and Little Wolf Creek. The only feature of unusual interest in the construction of this section of the project was that it was necessary to use 65 foot timber piling in the main channel of the Little Wolf Creek bridge to get the necessary bearing for the structure.

The underpass structure proper is located about 200 feet east of the Wolf Point depot and will carry the railway company's main line, passing track and house track. The structure is on a skew of 67 degrees 15 minutes with the main line of the railroad. The main structure is of reinforced concrete, resting on 278, 40 foot treated timber piles which were driven to a safe bearing of 28 tons each. The footings are 90 foot 6 inches long, 14 foot

3 inches wide, and 3 foot 6 inches thick and contains 330 cu. yds. of Class "A" concrete. The abutments were built with a retaining wall and 10 columns with a passage way between for the side walks. Each abutment contains about 250 cu. yds. of Class "A" concrete and 56,000 lbs. of reinforcing steel. The main line and passing track of the Great Northern are each carried on six steel beams on which a U shaped ballast plate is welded. The ballast plate is covered with 1½ inches of Asphalt plank, 3 layers of presaturated cotton fabric and 5 coats of hot asphalt, then filled with one and one-half feet of gravel ballast on which the track was laid. The passing track is carried on 4 steel beams and the rails are held in place with rail clips. The top is completed with 3 concrete slabs and concrete hand rail posts. The structure contains a little more than 200,000 lbs. of structure steel.

The structure is so designed that all sub-drainage will be sealed out. Copper seals were placed in all expansion and construction joints. A 330 foot sub-slab was constructed so as to connect with the footings of the abutments and wing wall, while outside of the structure retaining walls were built with the sub-slab. This makes a water proof box in which is placed 1180 cu. yds. of gravel ballast. The ballast is then covered with concrete pavement. The remainder of the concrete pavement and intersections are placed on 6½ inches of gravel sub-base.

Due to no natural drainage and the city sewer system being too small to carry storm waters, it was necessary to construct a sump and install a pump to dispose of the storm waters. Three manholes were constructed, one in each abutment and one in the center of the roadway, connected to the sump with 12 and 15 inch reinforced concrete pipe. The sump is 32 feet deep with a automatic, 500 gal. per minute, electric pump, which forces the water to the surface. The water is then disposed of through a open ditch about 1,000 feet long.

The following will give some idea of about what the final quantities will be on the underpass proper: 17,000 cu. yds. of unclassified excavation, 700 cu. yds. of structure excavation, 200,000 lbs. of structure steel, 152,000 lbs. of reinforcing steel, 1555 cu. yds. of Class "A" concrete, 52 cu. yds. of Class "D" concrete, 328 sq. yds. of 8 inch concrete pavement. 2889 sq. yds. of 6 inch concrete pavement, 720 lin. feet of 6 inch concrete curb, 840 sq. yds. of concrete side walk, 1100 sq. ft. of asphalt plank and waterproofing, lighting system and the drainage system.

The total cost of the project, including additional work and railway force account, will be in the neighborhood of $210,000.00. The structure should be completed and open to traffic about November 1, 1f this year.

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General Grant sat busy at his improvised desk at camp one day. A young officer, obviously very new at the game, was ushered into his tent and stood for several moments before the great general, unacknowledged. Finally, unable to stand the suspense longer, he cleared his throat, and said, "General Grant, I am the new officer. I have just been graduated from West Point, first in my class."

For a moment more Grant continued to write, but finally raised his head, and gave the young man a long look. "Young man, there were twenty-three men in my class -- and I was twenty-third. I don't just recall who was first ..."

.....

RANDOM RIP RAP

ADD THESE TO YOUR DICTIONARY

as submitted by a Designer

Engineer: A highway genius who sits and thinks and thinks and thinks, etc.
Chief Draftsman: Another genius who just sits -- .
Checker: A man with a red pencil, but without a conscience.
Designer: A "dope" who puts his own ideas on paper for the Engineer and Chief Draftsman to change.
Assistant Designer: A semi-conscious "dope."
Tracer: The slave type of man, who, knowing nothing himself, never understands what the Designer thinks he knows.
Commuter: (See Vol. 2 No. 7 September issue of Center Line) + the rugged individualism of an Assistant Designer.
Dogger: A nervous type of individual who is afraid that he may one day become a mechanical genius.
Blue Print Boy: A skunk with a dirty neck who smokes cigarettes, watches the clock and sometimes makes a print.
Drafting Room: A place where the time between arguments is spent in making drawings to be changed by the Engineer and Chief Draftsman.

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The Hon. Wilburn Cartwright, Representative in the Congress from Oklahoma, was a recent speaker on the National Radio Forum, speaking on Plans for Future Highway Improvement. The Gentleman from Oklahoma concluded his address with the following poem, author unknown, but titled

THAT'S WHAT OLD CAESAR DID

When Caesar took a westward ride
And grabbed the Gauls for Rome,
What was the first thing he did
To make them feel at Home?
Did he increase the people's loans,
No! he dug in and built good roads --
That's what old Caesar did.

He built good roads from hill to hill,
Good roads from vale to vale;
He ran a good-roads movement
Till Rome got all the kale.
He told the folks to buy a home,
Built roads their ruts to rid,
Until all the roads led to Rome,
That's what old Caesar did.

(Continued)

And, if our Nation wants to be
The center of the map,
Where folks will want to settle down
And live in plenty's lap;
If this broad land its own abodes
Of poverty would rid,
Then let us plan and build good roads,
Just like old Caesar did!

.....

With the fall of the year already here and the Engineering Personnel planning their vacations, rumors are apt to circulate. Walt Koester, Acting Project Engineer at Opheim, Montana, has evidently caused the boys considerable worry and concern as it has been rumored that Walt plans on walking into the sea of matrimony some time this winter (the exact date has not been made public as Walt thinks that he will do quite nicely without his crew). The Boys that have known Walt for a good many years are not much upset however, as it is claimed that this will be the tenth consecutive year that such stories have been brought to their attention. If this rumor is verified, we are going to turn Gob Bain over to Walt for detailed instructions to the Lovelorn, because, like Walt, Gob is getting along in years.

.....

It was a sunny, lazy day in June. The streets of the little Alabama town were nearly deserted. Along the sidewalk presently there strolled a courtly gentleman in the frock coat and wide-brimmed hat of the Southern Colonel. A shifty-eyed negro, much the worse for likker, shambled along in the opposite direction. As the two passed, the darky spoke angrily and drunkenly to the Colonel: "Git outa mah way, yo po' white trash, I'se a mean niggah."

They buried the darky the next day, down in the little cemetery by the river. At the trial of the Colonel the jury deliberated for two entire minutes. Then they filed in and announced that they had reached a decision. The Judge called for their verdict.

The foreman of the jury arose and in a calm, unperturbed manner hit the nearest cuspidor. "Suicide," he said.

.....

Methuselah ate what he found on his plate,
And never, as people do now . . .
Did he note the amount of the caloric count,
He ate it because it was chow.
He wasn't distrubed as at dinner he sat
Destroying a roast or a pie,
To think it was lacking in granular fat
Or a couple of vitamins shy.
He cheerfully chewed every species of food,
Untroubled by worries or fears
Lest his health might be hurt by some fancy dessert,
And -- he lived over nine hundred years.

Exceptionally cold weather in Seattle inspired the following pseudo-meteorlogical prose-poem:

"Listen, my children, and you shall hear what makes our weather at present so queer. Just three weeks ago, or maybe 'twas four, they opened to traffic the Great Northern bore. The very next day, as perhaps you recall, the doggone thermometer started to fall!

"The wind from the East, it started to blow, and first we had frost and next we had snow. It snowed and it froze and the mornings were raw. We're waiting and hoping, but still there's no thaw. There must be a reason behind it, no doubt, and so, while I shivered I figured it out.

"That hole through the mountains is causing a draft, like breezes that sweep through a dumb-waiter shaft. The winds from Montana they sweep through the bore, and so we are frozen as never before. Our coal piles are shrinking, our faucets won't run, and all are complaining, yet nothing is done!

"Of course the new tunnel, it fills a great need. It cuts down the mileage, increases the speed. But may we suggest as a well-meaning friend, they hang up a storm door, at least on this end? And may we suggest to the railroading crew, they close it behind them when they have passed through.

"And early next summer, when heavens are fair, we'll ask that the storm door be taken from there. And thus in the Inland, where folks often roast, they'll all be refreshened by a breeze from the coast."

..... G. E. Woodward ....

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Will the person who submitted the problem about the cigarette-smoking card players please furish us with the answer? It's a good riddle, but we want to be able to back it up.

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Here is a 1922 recipe, guaranteed to work successfully in 1939:

Take one reckless, natural-born fool.
Two or three drinks of bad liquor.
A fast, high-powered motor car.
Soak the fool well in the liquor, place him in the car and let him go. After due time remove from the wreckage, place in black, satin-lined box and garnish with flowers.

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FLASH from Wolf Point: Recently two nice looking young ladies entered the building, looked slyly about in the Drafting Room and one was heard to say, "There's Genie." (This has since been denied). After which they hurriedly departed. This worried some of the boys considerably, as nothing could be learned upon questioning Gene. They did, however, leave two large stones in "Genie's" car. Now we aren't too inquisitive but we feel that we are entitled to some sort of explanation. (Note: This is the first time that Gene Olson has been referred to as "Genie" and we think it very, very cute.)

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